

**SPECIAL USE PERMIT-1-02. VoiceStream Wireless Extension  
Staff Report for April 9, 2002, Board of Supervisors Public Hearing**

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This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

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**PUBLIC HEARINGS**

Building C Board Room; County Government Complex  
Planning Commission: March 4, 2002, 7:00 p.m.  
Board of Supervisors: April 9, 2002, 7:00 p.m.

**SUMMARY FACTS**

Applicant: Ms. Ambre Blatter  
Land Owner: Mr. Jonathan C. Kinney, Trustee

Proposed Use: 20 foot extension of existing 190-foot tower-mounted wireless communication facility

Location: 10039 Old Stage Road; Stonehouse District

Tax Map and Parcel No.: (4-1)(1-10)

Primary Service Area: Outside

Parcel Size: 196 acres

Existing Zoning: A-1, General Agricultural

Comprehensive Plan: Rural Lands

Surrounding Zoning: North, South, East West: A-1, General Agricultural

Staff Contact: Jill E. Schmidle - Phone: 253-6685

**STAFF RECOMMENDATION:**

Staff finds the proposed addition consistent with the surrounding zoning and development and consistent with the Comprehensive Plan. On March 4, 2002, the Planning Commission voted 7-0 to approve the proposal with the attached conditions. Staff recommends the Board approve this proposal with the conditions listed in the staff report.

## **Description of Project**

Ms. Ambre Blatter of VoiceStream Wireless has applied on behalf of Jonathan C. Kinney for a special use permit to extend an existing 190-foot telecommunications tower twenty feet, for an overall height of 210 feet plus radio equipment cabinets. The purpose of the extension is to allow co-location on the existing Alltell tower. Communications towers over 35 feet require a special use permit in the A-1, General Agricultural District. On June 10, 1997, the Board of Supervisors approved Case No. SUP-12-97, which permitted a 190-foot telecommunications tower on this site. An extension of the existing tower also requires a special use permit.

## **Existing Conditions**

The existing tower is located on a 100 foot x 100 foot compound at the western end of a large, timbered parcel of approximately 196 acres. The property is located between Old Stage Road and Interstate 64. The tower location is approximately 3,400 feet west of the nearest residences on Route 30, Old Stage Road, including King's Village subdivision. The tower is located approximately 3,500 feet west of Old Stage Road and approximately 3,500 feet north of the closest home site in the Racefield subdivision. The site is approximately 800 feet northeast of the westbound lanes of Interstate 64. The parcel has approximately 4,000 feet of frontage on I-64 and 300 feet of frontage on Old Stage Road. The topography of the parcel is rolling with ravines and flatter areas. The tower is located on a relatively flat area within a depression. A band of mature pines and hardwoods, approximately 150 feet deep, has been retained along the parcel's I-64 frontage.

## **Surrounding Zoning and Development**

The property is zoned A-1, General Agricultural District and is surrounded by A-1 property. There are five parcels north of the site that total 252 acres, which belong to the Barnes Swamp Agricultural and Forestal District and are wooded and predominantly undeveloped. There are several parcels between the property and Old Stage Road that are zoned A-1 and contain single-family residences on large lots. Across Old Stage Road is the King's Village subdivision, zoned A-1. Interstate 64 is located to the west of the property. Across I-64 are several large parcels zoned A-1.

Staff finds the proposed use is compatible with the surrounding zoning and development. The site's relatively remote location places it at least two-thirds of a mile away from the closest residences, and the balloon test revealed minimal visibility from most areas. Visibility is discussed in greater detail in a later section.

## **Access**

Access to the site is from Old Stage Road through an existing dirt and gravel logging road which is locked when not in use. The length of the road is approximately 4,000 feet. The use does not generate a significant amount of additional traffic, and staff does not anticipate an extension would generate significant additional traffic.

## **Comprehensive Plan**

The property is designated Rural Lands by the 1997 Comprehensive Plan. Rural Lands are properties containing farms, forest, and scattered houses, and are exclusively outside the Primary Service Area. Appropriate primary uses include agricultural and forestal activities, together with certain recreational and public or semipublic and institutional uses which may require a spacious site and which are compatible with the natural and rural surroundings.

General Land Use Development Standards suggest siting nonagricultural and nonforestal uses in areas designated away from agricultural/forestal uses, away from open farm fields, and away from important agricultural/forestal soils and resources. Due to the small size of the tower site, staff finds that this use does not interfere with surrounding forestal activity. Because of its distance from public roads and existing development, staff finds an

extension of this tower would not significantly impact the rural character of the area. In addition, the tower has minimal impact on the site's forestry use.

## **Visual Analysis of the Proposal**

To simulate the proposed height of the tower extension, the applicant conducted a publicly advertised balloon test on February 21, 2002. A balloon was raised and staff drove on nearby streets to gauge visual impacts.

### *Balloon Test Results*

The balloon test revealed the existing structure and proposed extension has minimal to no visibility on adjacent roadways and surrounding properties. Pictures taken during the test and a location map are attached.

Approximately one mile from the tower traveling westbound on I-64, the tower and balloon were visible for a distance less than .1 of a mile, due to higher topography at that location. The tower is not visible from any other section of I-64 west as a result of the wooded buffers along the property. Traveling eastbound on I-64, the balloon was not visible.

On Racefield Drive, approaching the intersection of Stewarts Road, at a point approximately one mile from the tower, the balloon was visible at the treeline. The balloon was not visible from any other portion of Racefield Drive.

At Barnes Swamp on Stewarts Drive at the New Kent County line, the balloon was visible above the treeline.

The balloon was not visible along Old Stage Road. At the Dzula Farm on Old Stage at the New Kent County line, the balloon was visible from portions of the property, approximately 600 feet off of Old Stage Road. At this location, the balloon was visible through the treeline, at a distance of approximately 3/4 of a mile from the tower location. The property owner did not express any reservations with the existing tower or the proposed extension.

### *Federal Aviation Administration (FAA) requirements*

Per Federal requirements, all structures greater than 200 feet above ground level (AGL) must be marked and/or lighted. Owners/developers of all structures greater than 200 feet AGL are required to provide notice to the FAA, which will then conduct an aeronautical study for the specific project. Structure marking may consist of alternating bands of orange and white paint (for daytime visibility) and red obstruction lights (for night visibility). As an alternative to this combination, the FAA may allow a dual lighting system featuring red lighting at night and medium intensity white strobe lighting during the day. Because the extension exceeds 200 feet, a marking system would be required by the FAA. Staff prefers a red beacon light or lights of low-medium intensity rather than a white strobe light.

## **Relationship to the County's Performance Standards for Wireless Communications Facilities**

On May 26, 1998, the James City County Board of Supervisors adopted several performance criteria for wireless communications facilities (a copy of these standards is attached for your reference).

Section 24-124 of the Zoning Ordinance states that "in considering an application for a special use permit for a Wireless Communications Facility, the planning director shall prepare a report identifying the extent to which the application takes into account the 'Performance Standards for Wireless Communication Facilities,' dated May 26, 1998, and endorsed by the Board of Supervisors. In general, it is expected that all facilities shall substantially meet the provisions of the above performance standards."

As noted in the performance criteria, in order to maintain the integrity of James City County's significant historic, natural, rural, and scenic resources, to preserve its existing aesthetic quality and its landscape, to maintain its quality of life and to protect its health, safety, general welfare, and property values, tower mounted wireless communications facilities (WCFs) should be located and designed in a manner that minimizes their impacts to the maximum extent

possible and minimizes their presence in areas where they would depart from existing and future patterns of development. To implement these goals, the Planning Commission and the Board of Supervisors have adopted the Performance Standards for use in evaluating special use permit applications. While all of the standards support these goals, some may be more critical to the County's ability to achieve these goals on a case-by-case basis. Therefore, some standards may be weighed more heavily in any recommendation or decision on a special use permit, and cases that meet a majority of the standards may or may not be recommended for approval.

The standards generally address the need to explore any other co-location alternatives prior to proposing a new tower facility, locating and designing the tower to be consistent with existing and future surrounding development and the Comprehensive Plan, minimizing the visibility of a new tower and appropriately buffering the new tower from adjacent views.

Staff comment on the application, with respect to the Performance Standards, is below:

A. Co-Location and Alternatives Analysis

These standards encourage co-location. Since this extension is a co-location on an existing tower, and eliminates the need for constructing a new tower, staff finds that this application meets the co-location and alternatives analysis standards.

Condition Nos. 6 and 13 of the existing special use permit outline requirements for co-location, including good faith negotiations to allow the County to install public communications equipment.

Where new towers are permitted and approved, these standards allow for maximum co-location opportunities possible, thereby minimizing the number of new sites within the County as a whole.

Standard A4 will be met through proposed SUP conditions.

B. Location and Design

Performance Standard B1 states that towers and tower sites should be consistent with existing and future surrounding development and the Comprehensive Plan. More specifically, towers should be compatible with the use, scale, height, size, design, and character of surrounding existing and future uses, while protecting the character of the County's scenic resource corridors and their view sheds. Staff finds that while the proposed extension will be partially visible in a few select locations, the impact on the viewshed will be minimal. In addition, staff finds that the co-location opportunity should be advocated rather than encourage a new tower in another location.

As discussed in the sections on surrounding development and zoning and the Comprehensive Plan, staff finds the application meets this performance standard.

Performance Standard B2 states that new towers should have minimal intrusion on residential areas and on scenic resource corridors. Since such a small portion of the tower (less than 25 percent of the tower) will be visible and in very limited locations, staff finds that the extension will have minimum intrusion on residential areas, historic and scenic resource areas or roads, or scenic resource corridors.

For areas designated rural lands on the Comprehensive Plan that are within 1,500 feet of the tower, the extension has little to no visibility. For rural lands that are more than 1,500 feet from the tower, no more than the upper 25 percent of the tower should be visible. In the cases noted previously (I-64, Dzula Farm, Racefield Drive, Barnes Swamp), less than the upper 25 percent of the tower will be visible.

For the most part, the tower is not visible above the treeline, and the surrounding area contains enough tree cover to screen the tower's visibility.

Performance Standard B3 does not apply.

Performance Standard B4 states that towers should be less than 200 feet to avoid lighting. This application does not meet this standard.

Performance Standard B5 states that towers should be freestanding and not supported with guy wires. Staff finds the application meets this standard.

C. Buffering

The performance standards state that towers should be placed on a site in a manner that maximizes buffering from existing trees, including a recommended 100-foot wide wooded buffer of existing mature trees around the base of the tower, and that the access drive should be designed in a manner that provides no off-site view of the tower base or related facilities.

Staff finds the application exceeds this performance standard. As noted above, the tower site takes maximum advantage of existing trees and vegetation to screen as much of the entire facility as possible from view from adjacent properties and public roads. The access drive is approximately .7 of a mile in length and does not provide a view of the tower base or related facilities.

Surrounding areas are primarily rural in character. Staff finds that the proposed extension is compatible with the existing conditions, and accommodates a service need in this area of the County without adding a new tower.

**Recommendation:**

Staff finds the proposed tower consistent and compatible with existing surrounding structures and zoning. Staff also finds that the application is consistent with the Comprehensive Plan and generally meets the County's performance standards for Wireless Communications Facilities by encouraging co-location and avoiding placement of a new tower. On March 4, 2002, the Planning Commission voted 7-0 to approve the proposal with the attached conditions. In consideration of these factors, staff recommends the Board approve the application with the following conditions:

1. All towers shall be designed and constructed for at least three users and shall be certified to that effect by an engineering report prior to final site plan approval.
2. The tower shall meet or exceed the structural requirements as set out in the most current version of "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures," published by the Electronic Industries Association. A report certifying that these structural requirements will be met shall be submitted prior to preliminary site plan approval.
3. A statement from a registered engineer that NIER (nonionizing electromagnetic radiation) emitted from any equipment on or service the facility does not result in a ground level exposure at any point outside such facility which exceeds the lowest applicable exposure standards established by any regulatory agency of the U.S. Government or the American National Standards Institute shall be submitted prior to preliminary site plan approval.
4. Following construction of the facility, certification by the manufacturer or an engineering report by a Virginia-registered structural engineer, shall be filed by the applicant indicating the tower height, design, structure, installation and total anticipated capacity of the structure, including number and type of antennas which could be accommodated, and demonstrating to the satisfaction of the building official that all structural requirements

and other safety considerations set forth in the BOCA Basic Building Code and Section 222(D) of the standards adopted by the Electronics Industries Association, or any amendment thereof, have been met.

5. The applicant shall allow other users to locate on the tower and site and shall provide the County, upon request, verifiable evidence of having made good faith efforts to allow such locations. To this end, the applicant agrees to execute a letter of intent prior to final site plan approval stating that the applicant will make every reasonable effort to accommodate all future requests to share space and that the applicant will negotiate in good faith with any party requesting space on the tower or site.
6. Maximum height of all towers shall not exceed 210 feet, plus radio antenna equipment.
7. The tower shall have a finish that is grey in color. Lighting, beacons, and other similar devices shall be prohibited unless required by the FCC or FAA. When required by the FCC or FAA, a red beacon light or lights of low-medium intensity shall be used rather than a white strobe light. Should the regulations and requirements of this subsection conflict with any regulation or requirement by the FCC or FAA, then the regulations of the FCC and FAA shall govern. At the time of site plan review, a copy of the FAA and/or FCC findings shall be made available to the County.
8. No advertising material or signs shall be placed on the tower.
9. Prior to installation of equipment other than that of the applicant's, an intermodulation study, prepared by a licensed engineer, shall be submitted to, and approved by the Planning Director or his designee, indicating that no interference with County-operated emergency communications equipment will take place.
10. If the use of the tower, or portions of the tower above the level of the uppermost equipment ceases, and the tower or said portion remains unused as a wireless communications facility or unused as a facility that supports public safety antenna for a period of six months, the tower or unused portion and associated and unused accessories shall be removed from the property by its owners. The applicant shall post a surety, performance bond, or cash equivalent in an amount sufficient to guarantee removal of any unused facility or part thereof prior to final site plan approval.
11. Prior to final site plan approval and prior to leasing space on the tower to additional users, the applicant shall offer a lease option and negotiate in good faith with the County to install public communications equipment on the tower. Evidence of good faith negotiations shall include, but not be limited to, documented and executed lease agreements for similar agreements for public use on a privately owned tower. The County shall, within a reasonable time period, make a final determination regarding its desire to locate on the tower and shall notify the applicant of its intentions.
12. A permanent Certificate of Occupancy shall be obtained within one year of approval of this special use permit, or the permit shall become void.
13. The tower shall be freestanding and shall not use guylines for support.
14. Any supporting structures, such as equipment sheds and huts, shall be of a similar design and material and/or color to that generally used on a single-family residence and shall be approved by the Director of Planning. A gable or shed roof shall be used on all equipment sheds and huts as determined by the Director of Planning prior to final site plan approval.
15. There shall be a future lease area to accommodate one additional tower and supporting equipment as generally depicted on the site plan prepared by the Timmons Group titled "360° communications - Norge Site," dated March 24, 1997 and site plan prepared by GEM Engineering Company titled "VoiceStream Wireless - ATC/Norge," dated January 15, 2002. Such lease area shall remain free of all strictures until such

time a second tower is constructed and the additional tower shall be subject to an administrative approval only. Said tower shall meet all requirements of this special use permit.

16. The fencing used to enclose the lease area shall be vinyl-coated and shall be dark green or black in color and shall be reviewed and approved by the Director of Planning prior to final site plan approval.
17. Existing trees in the ravines of the parcel and along the parcels Interstate 64 frontage shall be retained for screening purposes and shall not be timbered while a tower or towers remain on the property. These areas are identified as Areas 1 and 3 on the map entitled "HDWD MGMT AREA," prepared by Chesapeake Forest Products, dated February 1970.
18. This special use permit is not severable. Invalidity of any word, phrase, clause, sentence, or paragraph shall invalidate the remainder.

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Jill E. Schmidle

CONCUR:

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O. Marvin Sowers, Jr.

JES/adw  
sup1-02.wpd

Attachments:

1. Planning Commission minutes
2. Location map
3. Preliminary site plan (separate)
4. JCC Performance Standards for Wireless Communications Facilities, dated May 26, 1998
5. Approved conditions for Case No. SUP-12-97
6. Photos taken at the publicly advertised balloon test
7. Photo location map
8. Resolution